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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/085,714	02/28/2002	Eberhard Kinkelin	25045-12 1740		
7590 01/15/2004			EXAMINER		
John B. Hardaway, III NEXSEN PRUET JACOBS & POLLARD, LLC			GOFF II, JOHN L		
P.O. Box 10107 Greenville, SC 29603			ART UNIT	PAPER NUMBER	
			1733		

DATE MAILED: 01/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application	ı No.	Applicant(s)			
Office Action Summary		10/085,714		KINKELIN ET AL.			
		Examiner		Art Unit			
		John L. Gof		1733			
Period fo	The MAILING DATE of this commun or Reply	ication appears on the d	cover sheet with the d	correspondence address			
! HL. - Exte after - If the - If NC - Failu - Any I	ORTENED STATUTORY PERIOD FOR MAILING DATE OF THIS COMMUNITY of the may be available under the provisions SIX (6) MONTHS from the mailing date of this common period for reply specified above is less than thirty (3) period for reply is specified above, the maximum stare to reply within the set or extended period for reply reply received by the Office later than three months a ped patent term adjustment. See 37 CFR 1.704(b).	ICATION, of 37 CFR 1.136(a). In no event nunication. 0) days, a reply within the statuto attacyry period will apply and will a	, however, may a reply be tir by minimum of thirty (30) day sypire SIX (6) MONTHS from	nely filed  s will be considered timely. the mailing date of this communication.			
1)	Responsive to communication(s) file	ed on <i>03 October 2003</i> .					
		b)⊠ This action is non	-final.				
3)							
Dispositi	on of Claims	oo amaan <u>an panto q</u> aaj	70, 1000 O.B. 11, 40	0.0.0.210.			
4) Claim(s) <u>1-9</u> is/are pending in the application.							
	4a) Of the above claim(s) <u>7-9</u> is/are withdrawn from consideration.						
	) Claim(s) is/are allowed.						
6)⊠	Claim(s) 1-6 is/are rejected.						
7)	Claim(s) is/are objected to.						
8)[	Claim(s) are subject to restrict	tion and/or election req	uirement.				
Applicati	on Papers						
9) 🔲 -	The specification is objected to by the	e Examiner.					
10)	The drawing(s) filed on is/are:	a)☐ accepted or b)☐	objected to by the E	Examiner.			
	Applicant may not request that any objec	ction to the drawing(s) be l	held in abeyance. See	e 37 CFR 1.85(a).			
_	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
	The oath or declaration is objected to	by the Examiner. Note	the attached Office	Action or form PTO-152.			
Priority u	nder 35 U.S.C. §§ 119 and 120						
a)L * S 13)☐ A sir 37 a) 14)☐ A ref	Acknowledgment is made of a claim and all b) Some * c) None of:  1. Certified copies of the priority of certified copies of the priority of certified copies of the priority of certified copies of the certified copies of application from the Internation of the attached detailed Office action of the attached detailed of a claim for the certific reference was included of CFR 1.78.  The translation of the foreign language of the certific terence was included in the first sentence.	documents have been redocuments have been referenced from the priority document and Bureau (PCT Rule 1 for a list of the certified of domestic priority under the first sentence of guage provisional applier domestic priority under domestic priority under	received. received in Applications have been received 7.2(a)). d copies not received at 35 U.S.C. § 119(e) the specification or cation has been received at 35 U.S.C. § 120	on No d in this National Stage  d. ) (to a provisional application) in an Application Data Sheet. eived. and/or 121 since a specific			
Attachment(			<b>□</b> .				
2) Notice	of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PT ation Disclosure Statement(s) (PTO-1449) Pap	O-948) 5)	Interview Summary ( Notice of Informal Pa Other:	PTO-413) Paper No(s) atent Application (PTO-152)			

Art Unit: 1733

### **DETAILED ACTION**

### Election/Restrictions

1. Applicant's election of Group I, claims 1-6, in the response received 10/3/03 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

## Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

## Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1733

Claim 2 requires "said triethylene glycol is present in an amount between 5 and 60 mol % and said triethylene glycol is present in an amount between 0 and 40 mol %". It is unclear what is required by the claim. The specification discloses triethylene glycol is present in an amount between 0 and 40 mol % (See page 7, paragraph 24), and as such it is suggested to delete "said triethylene glycol is present in an amount between 5 and 60 mol %". Additionally in line 4 of the claim delete "ins" and insert therein - - in - -, and there is insufficient antecedent basis for "high molecular weight" in line 3.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Frankosky (WO 91/09166).

Frankosky discloses a method of bonding a hydrophilic copolyetherester film to a polyester batt (i.e. fabric) using a hotmelt polyester adhesive (melting point of 150 °C) wherein the bonded composite has an improved ability to avoid delamination. Frankosky teaches the film (directly bonded to the polyester batt through the layer of adhesive) may comprise a single layer of hydrophilic copolyetherester or a multilayer laminate of hydrophilic copolyetherester and hydrophobic copolyetherester with the hydrophilic copolyetherester film formed from

Art Unit: 1733

terephthalic acid and polyethylene glycol (molecular weight of 2000) (Page 2, lines 35-38 and Page 3, lines 1-40 and Page 4, lines 1-40 and Page 5, lines 1-20 and Examples 1-4).

### Claim Rejections - 35 USC § 103

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 9. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frankosky as applied in paragraph 7 above, and further in view of Mahler (U.S. Patent 5,418,044) or the admitted prior art (Specification pages 1-3).

Frankosky as applied above teaches all of the limitations in claim 3 except for an express teaching that the hydrophobic copolyetherester film has all of the claimed characteristics.

However, it is noted that the hydrophobic copolyetherester film taught by Frankosky has the same long chain and short chain units as those claimed, and one of ordinary skill in the art at the

Art Unit: 1733

time the invention was made would have readily appreciated using as the hydrophobic copolyetherester film taught by Frankosky any of the well known and conventional films in the art having the same disclosed long chain and short chain units such as the hydrophobic copolyetherester film suggested by Mahler or the admitted prior art as only the expected results would be achieved.

Mahler discloses a hydrophobic copolyetherester film formed of the same long chain and short chain units as the hydrophobic copolyetherester film taught by Frankosky that has the same characteristics as those in claim 2 (Column 1, lines 13-15 and Column 4, lines 49-68 and Column 5, lines 1-19).

The admitted prior art discloses it is known to bond a hydrophobic copolyetherester film (such as Sympatex a film formed of the same long and short chain units as the hydrophobic copolyetherester film taught by Frankosky and having the same characteristics as those in claim 2) to a polyester fabric or interlining using a polyester or copolyester based hot melt adhesive. The admitted prior art teaches the adhesive is applied by any of the known methods such as scatter coating, double dot coating, past coating, or paste-dot coating. However, the admitted prior art teaches that these laminate are not resistant to multiple washings at 60 °C (Paragraphs 4, 7, and 10).

10. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Frankosky as applied in paragraph 7 above, and further in view of the admitted prior art.

Frankosky as applied above teaches all of the limitations in claim 6 except for a specific recitation of how the hotmelt polyester adhesive is applied. However, Frankosky teaches that any well known and conventional technique can be used to apply the adhesive such that it would

Art Unit: 1733

have been obvious to one of ordinary skill in the art at the time the invention was made to apply the hotmelt polyester adhesive taught by Frankosky using any of the well known and conventional techniques for applying hotmelt polyester adhesives such as paste dot coating, powder dot coating, scatter coating, etc. as these were well known techniques in the art for applying polyester adhesives as shown for example by the admitted prior art (See paragraph 9 for the teachings of the admitted prior art) and only the expected results would be achieved.

11. Claims 1, 2, and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horn (U.S. Patent 5,447,783) in view of either one of Tanaka et al. (U.S. Patent 4,130,603), Frankosky, or the admitted prior art.

Horn discloses a method of bonding a multilayer laminate comprising a hydrophilic copolyetherester layer (formed from terephthalic acid and polyethylene glycol or butanediol (molecular weight of 400-3500)) and a hydrophobic copolyetherester layer to a polyester fabric using conventional laminating adhesives to form a bonded composite having an improved ability to avoid delamination (Column 1, lines 6-49 and 56-58 and Column 2, lines 32-34 and Column 3, lines 4-7 and 43-48 and Column 7, lines 30-40 and Column 9, lines 45-58 and Column 10, lines 8-17). Horn is silent as to a particular adhesive for laminating copolyetherester multilayer to the polyester fabric. However, Horn teaches conventional adhesives are used such that it would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the laminating adhesive taught by Horn any of the well known and conventional adhesives for laminating polyester layers (e.g. copolyetherester layer to a polyester fabric) such as those suggested by any of Tanaka et al., Frankosky (See paragraph 7 for the teachings of Frankosky), or the admitted prior art (See paragraph 9 for the teachings of the admitted prior art).

Art Unit: 1733

Tanaka et al. disclose a hotmelt copolyester adhesive useful for bonding together polyester layers in textile articles to give the textile articles improved resistance to delamination. Tanaka et al. teach the adhesive is applied by techniques such as dotting or scattering (Column 1, lines 7-14, 38-43, and 57-61 and Column 2, lines 8-11 and 28-32 and Column 3, lines 49-53).

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horn and either one of Tanaka et al., Frankosky, or the admitted prior art as applied in paragraph 10 above, and further in view of either one of Mahler or the admitted prior art.

Horn as modified by either one of Tanaka et al., Frankosky, or the admitted prior art as applied above teach all of the limitations in claim 3 except for an express teaching that the hydrophobic copolyetherester film has all of the claimed characteristics. However, it is noted that the hydrophobic copolyetherester film taught by Horn has the same long chain and short chain units as those claimed, and one of ordinary skill in the art at the time the invention was made would have readily appreciated using as the hydrophobic copolyetherester film taught by Horn as modified by either one of Tanaka et al., Frankosky, or the admitted prior art any of the well known and conventional films in the art having the same disclosed long chain and short chain units such as the hydrophobic copolyetherester film suggested by Mahler (See paragraph 9 for the teachings of Mahler) or the admitted prior art (See paragraph 9 for the teachings of the admitted prior art) as only the expected results would be achieved.

13. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over the admitted prior art in view of Horn or Frankosky.

The admitted prior art discloses it is known to bond a hydrophobic copolyetherester film (such as Sympatex) to a polyester fabric or interlining using a polyester or copolyester based hot

Art Unit: 1733

melt adhesive. The admitted prior art teaches the adhesive is applied by any of the known methods such as scatter coating, double dot coating, past coating, or paste-dot coating. However, the admitted prior art teaches that these laminate are not resistant to multiple washings at 60 °C (Paragraphs 4, 7, and 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use as the copolyetherester taught by the admitted prior art a multilayer comprising a hydrophilic copolyetherester layer and a hydrophobic copolyetherester layer as it was well known in the art to include in the copolyetherester layer a hydrophilic layer as shown for example by either one of Horn (See paragraph 11 for the teachings of Horn) or Frankosky (See paragraph 7 for the teachings of Frankosky) to form a laminate with the ability to avoid delaminating.

#### Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John L. Goff** whose telephone number is (571) 272-1216. The examiner can normally be reached on M-F (7:15 AM - 3:45 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

John L. Goff

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